for the *Scirpus-Phragmites* growths especially are in numerous cases not present; on the other hand, the outermost vegetation belts, especially the *Characeæ*, with a fairly well-marked *Nitella* zone of 13–30 m., reach much greater depths than in the Baltic lakes (Lake of Geneva and Bodensee.) The higher we go up the mountains the more the importance of the vegetation belts as nutrition for the animals decreases (Zschokke, 1900, p. 14). In lakes above 1600 m. they generally play a secondary part. Yet *Potamogeton*, *Sparganium*, and especially *Batrachium* grow as high up as 2100–2500 m. A very great part of the vegetation in the high alpine lakes is for the rest made up of Characeæ; where these are absent Confervaceæ, Diatoms, and Desmidiaceæ, in addition to the phytoplankton, are in the majority; they form the "Feutre organique" (Forel, vol. i. p. 119, Lake of Geneva), "Gefilz" (Lorenz v. Liburnau in *Hallstättersee*, depth of 40 m., 1898, p. 189), "Grundalgenzone" (Brand, *Starnbergersee*, 1896, p. 8). Zschokke records that these algæ coverings in the high alpine lakes are of all the more importance as producers of oxygen, as the water above 1800 m., according to Boussingault, only absorbs, as stated above, small quantities of oxygen, owing to the diminished atmospheric pressure.

The main work on the flora in the alpine lakes of this district is Magnin's *La végétation des lacs du Jura*, 1904. The belts are the same as in our lakes: the *Scirpus-Phragmites* zone, the *Nuphar-Potamogeton natans* zone, the *Potamogeton lucens-perfoliatus* zone, the *Characeæ* zone. As specially characteristic of the lakes of Jura, Magnin mentions the great development of a *Nuphar* zone (pp. 374, 408). He further remarks on a considerable difference between the flora in lime districts, specially characterised by many *Characeæ*, and in the silicate districts, and maintains that not only the *Characeæ*, but also the *Potamogeton*, attain their greatest development in high mountain lakes, not in the less highly situated lakes.

Even if the organic life is instrumental in causing the decalcification of the lake-water and the richness in lime of the lake-bottom, it is hardly of so great importance here as in the Baltic lakes: in part owing to the lower summer temperature, in part because a much greater amount of the organic material of the lake is destroyed in the lake itself and again acts, through the carbonic acid set free during the destruction processes, as lime dissolving. The blue-green algæ especially (Lake of Geneva, Neuchatelersee, Chodat, 1897, p. 289, 1898, p. 49; lac d'Annecy, Le Roux, 1907, p. 347) and the Characeæ seem to play the most prominent part as decalcifiers.

It must be said that, as a rule, the deposits derived from plankton and from the littoral region are not nearly so instrumental in closing up the lakes as in the Baltic region. The filling up and the dis-